

Please type a plus sign (+) inside this box →

PTO/SB/01 (12-97)

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

Declaration
Submitted
with Initial
Filing

OR

Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number 9351-20/HSF

First Named Inventor Chen et al.

COMPLETE IF KNOWN

Application Number n/a

Filing Date Filed concurrently herewith

Group Art Unit n/a

Examiner Name n/a

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CATALYTIC HUMIDIFIER AND HEATER FOR THE FUEL STREAM OF A FUEL CELL

the specification of which

(Title of the Invention) is attached hereto

OR

 was filed on (MM/DD/YYYY) as United States Application Number or PCT InternationalApplication Number and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	Certified Copy Attached? NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

 Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Customer Number → Place Customer Number Bar Code Label here

Registered practitioner(s) name/registration number listed below

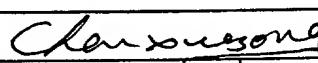
Name	Registration Number	Name	Registration Number
Daniel R. Bereskin	22,257	H. Samuel Frost	31,696
Richard J. Parr	22,836	Philip Mendes da Costa	33,106
H. Roger Hart	26,426	Robert B. Storey	33,108
David W.R. Langton	27,747	John R. Rudolph	38,003
C. Lloyd Sarginson	29,245	Robin L.A. Coster	38,016
Timothy J. Sinnott	31,083	Michael E. Charles	38,036

Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: Customer Number OR Correspondence address below

Name	Bereskin & Parr				
Address	Box 401				
Address	40 King Street West				
City	Toronto	State	Ontario	ZIP	M5H 3Y2
Country	Canada	Telephone	(416) 364-7311		Fax (416) 361-1398

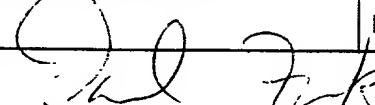
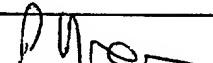
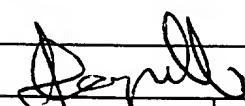
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:	<input type="checkbox"/> A petition has been filed for this unsigned inventor								
Given Name (first and middle if any)			Family Name or Surname						
Xuesong			Chen						
Inventor's Signature						Date	06/06/01		
Residence: City	Brampton	State	Ontario	Country	Canada		Citizenship	Chinese	
Post Office Address	#1817 - 2 Hanover Road								
Post Office Address	same								
City	Brampton	State	Ontario	ZIP	L6S 4H9		Country	Canada	
<input checked="" type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto									

Please type a plus sign (+) inside this box →

PTO/SB/02A (3-97)
Approved for use through 9/30/98. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION				ADDITIONAL INVENTOR(S) Supplemental Sheet			
				Page 1 of 1			
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
David				Frank			
Inventor's Signature					Date		06/06/00
Residence: City	Scarborough	State	Ontario	Country	Canada	Citizenship	Canadian
Post Office Address	25 Cleethorpes Blvd.						
Post Office Address	same						
City	Scarborough	State	Ontario	ZIP	M1S 2S7	Country	Canada
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Pierre				Rivard			
Inventor's Signature					Date		6/6/00
Residence: City	Toronto	State	Ontario	Country	Canada	Citizenship	Canadian
Post Office Address	113 Hove Street						
Post Office Address	same						
City	Toronto	State	Ontario	ZIP	M3H 4Z5	Country	Canada
Name of Additional Joint Inventor, if any:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Joe				Cagnelli			
Inventor's Signature					Date		6/6/00
Residence: City	Toronto	State	Ontario	Country	Canada	Citizenship	Canadian
Post Office Address	59 Lapp Street						
Post Office Address	same						
City	Toronto	State	Ontario	ZIP	M6N 3W3	Country	Canada

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/02C (3-97)

Approved for use through 9/30/98. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a
valid OMB control number.

DECLARATION

REGISTERED PRACTITIONER INFORMATION (Supplemental Sheet)

Name	Registration Number	Name	Registration Number
Micheline Gravelle	40,261	Robert H.C. MacFarlane	40,366
Andrew I. McIntosh	40,453	Stephen M. Beney	41,563
Shawn D. Jacka	43,379		

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

UNITED STATES

ASSIGNMENT

WHEREAS WE, XUESONG CHEN, DAVID FRANK, PIERRE RIVARD and JOE CARGNELLI, whose full post office addresses are 1817-2 Hanover Road, Brampton, Ontario, Canada L6S 4H9; 25 Cleethorpes Blvd., Scarborough, Ontario, Canada M1S 2S7; 113 Hove Street, Toronto, Ontario, Canada M3H 4Z5 and 59 Lapp Street, Toronto, Ontario, Canada M6N 3W3 have invented certain new and useful improvements in an invention entitled **CATALYTIC HUMIDIFIER AND HEATER FOR THE FUEL STREAM OF A FUEL CELL** for which an application for United States Letters Patent was executed by us concurrently herewith under the above title,

AND WHEREAS HYDROGENICS CORPORATION, a corporation of 100 Caster Avenue, Woodbridge, Ontario, Canada L4L 5Y9, has acquired from us our whole right, title and interest for the United States of America and all other countries in and to the said invention and in and to any Letters Patent that may be obtained therefor, and in and to said application,

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt of all of which is hereby acknowledged, we, XUESONG CHEN, DAVID FRANK, PIERRE RIVARD and JOE CARGNELLI, by these presents confirm that we have sold, assigned and transferred and do hereby sell, assign and transfer unto the said HYDROGENICS CORPORATION, our full and exclusive right to the said invention in the United States of America and all other countries and our entire right, title and interest in and to any and all Letters Patent which may be granted therefor, and our entire right, title and interest in and to said application, and in and to any divisions, continuations, continuations-in-part and extensions of said application, together with the right to claim the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property based on said application for United States Letters Patent.

We agree that we will without further consideration do all such things and execute all such documents as may be necessary or desirable to obtain and maintain patents for said invention and for additions and modifications thereto in any and all countries, and to vest title thereto in said assignee, its successors, assigns and legal representatives or nominees.

We hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said HYDROGENICS CORPORATION, the assignee of our entire right, title and interest in and to the same, for its sole use and benefit, and for the use and benefit of its successors and assigns, to the full end of the term for which Letters Patent may be granted as fully and entirely as the same would

have been held by us had this assignment and sale not been made.

EXECUTED this 06 day of June, 2000, at WOODBRIDGE, Ontario.

Makan Joo
Witness

Xuesong Chen
Xuesong Chen

David Frank
David Frank

Makan Joo
Witness

Pierre Rivard
Pierre Rivard

Makan Joo
Witness

Joe Cagnelli
Joe Cagnelli

Makan Joo
Witness